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ABSTRACT

In an effort to teach all children to read as early as possible, educators are failing to teach the basic prerequisites. A model identifies the basic prerequisites for the development of reading skills in young children and suggests a hierarchy of goal acquisitions. The prerequisites are: (1) language development and verbal meaning, (2) perceptual skills, (3) attending skills, (4) listening skills, and (5) thinking skills. These skills form the basis by which the child learns to manipulate letters, words, and symbols and begins to see some form of equivalence between words and sentences and his own mental content. Language then begins to have meaning. The verbal and language meaning that each learner brings with him to school and the degree of equivalence with school language and verbal meaning will determine how easily or slowly the child learns to read. The model discussed is built on an educational program of prevention of reading problems rather than remediation. Methods are suggested for translating the various skill competencies into practical classroom instructional strategies. (CS)

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DEVELOPING PREREQUISITE FOR READING ...
A SEARCH FOR A RATIONALE

by

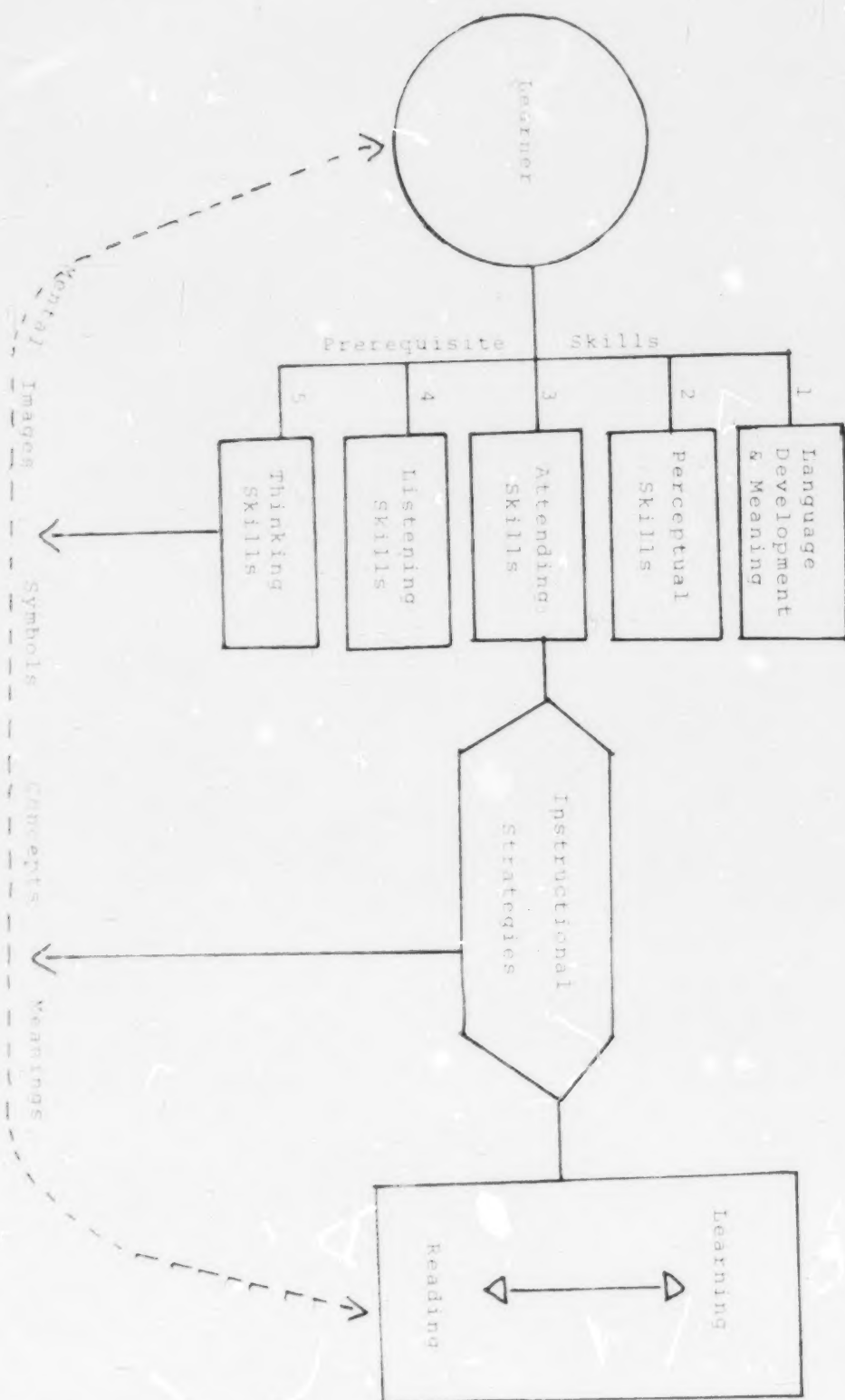
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An educational mania in the United States has reached epidemic proportions! This mania is reflected in a national anxiety, which is caused by the demand of parents, teachers, business, publishers, and even Tarzan that all children must read ... and as soon as they begin their schooling, if not sooner! In this national and urgent effort to have all children attain the most sacred domain of reading, we are creating and compounding the problem of helping children to read in our haste to teach reading, and in our failure to teach the learner the basic prerequisites for learning to read. The basic prerequisite must be developed if the child is to be assured a reasonable chance of succeeding in the complex task of reading.

The essential prerequisites that are necessary for the acquisition of reading skills by the young child are: (1) language development and verbal meaning, (2) perceptual skills, (3) attending skills, (4) listening skills, and (5) thinking skills. These skills form the basis for the child to manipulate letters, words, syntax, and verbal meaning which is the heart of learning to read. The introduction and

PROTOTYPE MODEL OF PREREQUISITE SKILLS FOR READING



mastery of these prerequisite skills form a declaration upon which must be built an educational program of prevention rather than an educational program of remediation. The model listed and discussed below suggests an educational program of prevention that can assure every child a way and a right to read.

The model identifies the prerequisite skills and suggests a hierarchy of goal acquisitions. This preferential ordering does not suggest a non correlation, as a definite relationship exists among listed competencies of language and verbal meaning, perceptual, attending, listening, and thinking skills. Rather these are separated for the ease of discussion, clarification, and emphasizing a particular focus and thrust in determining instructional strategy for the teacher and the learning activity of the child.

First, we shall discuss the development of language and verbal meanings.

The child's cry signals the beginning of his language development. Further, if we are to believe Chomsky and if he is correct in his present version of the 16th Century notion of man and his innate ideas, the human brain is predisposed at birth toward the acquisition of language.

The acquisition of language (Lefrancois, 1972) is an extremely complex process which involves much more than simply learning the names of concrete objects, but also abstract representational relations. Relations in the world are represented almost entirely by words in the language system. (Attneave, 1974). It is because of this fact that the development of language and verbal meaning

and the representational relation of language to the world, that we cannot leave to chance this development. Yet in the schools, we generally leave to chance the development of verbal and language meaning. Albeit we know that language and verbal meaning are the most important dimensions for the acquisitions of all further kinds of school learning, especially reading.

Recent research, debates, and interest concerning the usefulness of language training appear to be mainly concerned with the processes by which man acquires language, its sequence, and the pace of language development. While these elements of language development are important, this writer is mainly concerned with ways in which the child acquires language and verbal meaning. I believe that it is the verbal meaning that the child brings with him to school that helps or hinders in developing his reading intelligence.

The greatest single barrier to the acquisition of reading ability appears to be the different and limited meanings that children from various socio-economic classes hold for the verbal images, symbols, representations, and relations found in the school environment. How these images, symbols, representations, and relations square and are equivalent to the real thing (words) seems to me to be the crucial variable and the key to success or failure in reading. Because of the vast difference of verbal meaning, the young child cannot adequately meet the reading challenge. The language and verbal meaning which has common currency for him is so different from the expected meaning of the language and verbal meaning to which he is exposed causes a

"reading shock" and becomes a barrier from acquiring a sound reading intelligence.

It is important to deal with the nature of verbal and language meaning (Ausubel, 1963) since this is the type of learning which is predominant in the classroom. Then it would appear that the first task of the teacher is to help the young child develop language and verbal meanings that are appropriate for school learning, namely reading. To assess capability, the teacher should not count vocabulary items, length and complexity of sentences, but the meaning the vocabulary items and sentences hold for the learner. Because it is the meaning of symbols and representations that determines the child's capability to read.

As reading teachers, we must teach the young learner some form of equivalence between language or words and his mental content (i.e., images, and symbols) (Ausubel, 1963). When the child has learned some form of equivalence between his mental content and things, that is words in the language system, then there is meaning. The word chair, for example, must be equivalent to the child's image, idea, or symbol for chair, if the word chair is to have meaning. And the kind of equivalent meanings that the teacher must work towards is the meaning that the "school" deems appropriate in relation to the language the child brings with him. Once there is a match between the child's meanings and the school's meaning for a word, image, or symbol, then the child is ready to begin the difficult task of reading as he can

see the relation between the two things, his meaning and that of the school's.

The concept relation the learner has will become meaningful for him through experience activities. The child will then develop the concept of directionability. That is the understanding and orientation of spatial relationships. The meaning of such concepts as: above, behind, in front of, inside, outside, bottom, top, top and side of paper, hold the box, paper, or letter, in front of you and its relationship to something that gives children the added competence of what's involved in being able to read. And that brings us to the next prerequisite skill, namely the development of perceptual skills.

Perception can be explained as the way we interpret, integrate, and process information received by our senses. The gestalt psychology discovered the laws governing perception of wholes. Those laws were described by Koffka (1935) and were summarized more systematically by Hilgard and Bower (1966). The figure in any perception is the gestalt, or the part that stands out and is perceived. The ground is the background against which the figure appears. The young learner must learn to perceive figure ground relationship, figures in space, and left-right orientation before he will read. He must also be brought to differentiate characteristic letters in sight, sound, and shape. He must have adequate perceptual reception, discrimination among sounds and symbols, association among various components, and the ability to remember visual and auditory sequence. So you must teach them, if you should want children to read.

For example, the following shapes, C, O, I, U, and V are the basic elements contained in all letters of the alphabet. It is these shapes that the young child must master as they form the elementary distinguishing features of the letters of the alphabet. (Smith, 1968). Once the young learner has developed the perceptual skills to differentiate and discriminate between and among these shapes, he is ready to manipulate them to form the letters. As these letters are formed he should be provided an opportunity for visual and auditory discrimination as well as tactile differentiation. This will lead the learner to develop meaning and representational relationship between basic shapes and sounds. It will help him understand how lines and shapes are joined together to form letters and how letters are joined together to form words.

Teachers must do more for the learner than to let him manipulate lines, shapes, and sounds, if we hope to develop good readers. Merely letting a child manipulate shape, figures, and sound will not make him a better reader. It may possibly make him better able to distinguish shapes, sounds, and figures. So we must go one step further and let the child feel, sense, and internalize these shapes, figures, and sounds in relation to the alphabet and to words if we should want him to read. Teachers must help the child to develop a relationship between these perceptual skills and the letters of the alphabet and words for perceptual activities to have meaning. Educators must guide the young child to focus and attend to the appropriate shape, sound, and word cues to give depth to that meaning and relation.

Once the young child has learned meaning, orientation, and discrimination from the development of perceptual skills, he must then be taught how to attend to the appropriate cues. Teachers

must take care to teach the learner how to attend to relevant stimuli so an appropriate response behavior can come about. Until the child has mastery of attending skills, it is unrealistic for the school to expect him to learn to read. The attending skills that children need to master before they are able to read are visual and auditory in nature.

Before the child can respond appropriately to a reading cue, he must have a solution or attending behavior of wanted and unwanted messages. (Deutsch and Deutsch, 1963). The Deutschs assumed the existence of a shifting reference standard. For example, only the most important signal coming in will be acted on or remembered. Therefore, the cue that is significant for eliciting an appropriate response must be taught beginning with exaggerated differences and characteristics. This will help the child to appropriately attend and consequently perform adequately. We know that if the incoming message of the wanted content is too similar to the unwanted one (Peter, 1954) the child has difficulty in determining which cue to attend to. This leads to an inappropriate response and to failure. The child begins to fear reading and consequently has difficulty with reading and he becomes a problem for the school, his parents, and most important to himself.

Young children can be taught attending skills if we train them on discrimination problems with either color relevant or form relevant activities. Using color relevant or form relevant cues, the child is able to use his attending skills for new problems and is able to learn the relation and meaning of attending cues. This is demonstrated in fact that children are able to use learned

attending skills in solving new problems. Since even mentally defective children can learn (Zeaman, House, 1962) on such discrimination problems, it is suggested by this writer that all children could master these attending skills which will help him develop competencies for reading by using this procedure.

In addition to the above visual skills, the child needs to learn auditory attending skills through the development of appropriate listening activities.

The kind of listening skills that a child needs if he is to learn to read are attentive listening, appreciative listening, analytical listening, and marginal listening. The school must mandate the deliberate teaching of these listening skills in a systematic and structured manner. The activities and instructional strategy, however, do not need to be structured and could be spontaneous and incidental.

The young child must be given opportunities for attentive listening before he is asked to read. This involves situations in which directions, announcements, instructions, and accuracy of comprehension are involved. (Greene, 1971). As the learner participates in a variety of situations, opportunities are available for the development of attentive listening skills.

In appreciative listening, the learner is involved in how he feels about a story, poem, song, or dramatization. These feelings will develop meaning and relations. As the learner associates these meanings and relations to the words or other symbols, he is later able to transfer these meanings, relations and feelings to other problems such as in reading.

The teacher must also teach the child how to listen analytically before demanding that he reads. Such listening takes place when the child weighs what he hears against his personal experience. Here is where the teacher's role takes added significance as she helps the child incorporate appropriate meaning and relation. When appropriate meaning and relation for the child is equivalence to the thing (i.e., word, sentences) the learner is able to respond with the appropriate behavior. This behavior will become part of his covert repertoire and will facilitate the acquisition of reading.

And finally, marginal listening plays an important role in acquiring the skill to read. Marginal listening involves the ability of the listener to "tune out" with just enough arousal to bring the child back to the sound or language of the teacher. The teacher's voice tone sends certain signals and the child needs to respond appropriately. If the child has been provided with an opportunity for attending and has acquired attentive skills, marginal listening will be a natural consequence thereof. Marginal listening is obviously different from analytical listening, but all involve covert thought processes or thinking. The acquisition of these four kinds of listening skills will facilitate the reading processes and enhance the thinking abilities of the learner.

The learner must begin acquiring thinking skills if he is to ever have hope of learning to read. We know that a striking characteristic of children's thinking (ages 4-7) is their inability to classify, but they do have the ability to group objects in simple collections. The child's problem solving approach during his early school years is the use of mental images, rather than the

use of rules or principles. In other words, the thought processes of the young schooler are perception-dominated.

The teacher of young children who is interested in teaching thinking skills should make sure that the child has developed competencies in visual and auditory perception so that he may acquire and use appropriate mental images. The young learner should also experience grouping of objects, letters of the alphabet to form words, and have an opportunity to think of a variety of grouping combinations.

Certainly, the teacher must also develop meaningful verbal images. The mental and physical-manipulation of verbal images develop the kind of thinking skills the young child must develop and must have if he is to learn reading.

The teacher must provide activities for developing thinking skills by having the child participate in transductive reasoning. According to Piaget, the young child's reasoning or thinking lies in between inductive and deductive. He does not go from general to the particular (deductive) or from the particular to the general (inductive) but operates from the particular to the particular.... Let the teachers make use of transductive thinking by reaching a particular shape, sound, letter or word so that the child may learn.

The implication for the educator is that the young child's thought and language are qualitatively different from the adult. Adults cannot assume that what is valid for them is also valid for the child. Educators need to observe, listen, and understand

how the child thinks. Then we may provide the kinds of activities that will develop the thinking skills necessary to acquire the habit of reading.

In summary, let me state that in our haste to have all children read we may create obstacles to insure that only a few children read. These barriers and obstacles come about by our failure to provide each child with the necessary competent prerequisites. The basic and competent prerequisite discussed before are the critical imperatives that can insure that all children have a high degree of certainty of succeeding in the complex and difficult task of reading.

The critical imperatives for assuring successful reading skills and habits are language and verbal meaning, perceptual, attending, listening, and thinking skills. It is those verbal and language meanings that each learner brings with him to school, and the degree of equivalent meanings with the language and verbal meaning of the school, that will facilitate or hinder the child's acquisition of reading.

Unless the child has developed adequate equivalent language meanings and perceptual reception to be able to integrate his attending and listening skills and transform these into meaningful relations and images, his thinking skills will be less than efficient. And we need not expect the child to learn to read. But with the information and understanding we possess on children's thinking, let us utilize this knowledge and understanding. Let us use this knowledge of how children think to develop language and verbal meaning common to the child and school to develop

perceptual, attending, and listening skills. Further, let us as teachers, translate these understandings into practical classroom instructional strategies that will develop in the child the critical operatives for mastering the complex and difficult task of reading.

And finally, if we are sincere and serious about our commitment to teach reading to all children, let us insure that every child possesses the necessary prerequisite competencies before demanding that all children read. Thus, the educational effort will be a process of prevention, rather than a design for the intervention of remedial services. I invite you to join with me in that challenge!

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